




**BOSTON WATER AND  
SEWER COMMISSION**

**Annual Report 2007**



**A LEADER IN  
CONSERVATION**



*The word that best defines what  
BWSC has accomplished is*  
***conservation.***

*In fact, you can think of it as  
30 years of conservation—  
conservation of the  
***natural resources***  
that are vital to the quality of life  
of Boston's residents and the  
economic vitality of its businesses,  
and conservation of the  
***financial resources***  
BWSC needs to operate efficiently  
and effectively.*

## MESSAGE FROM THE EXECUTIVE DIRECTOR

In 1977 the Boston Water and Sewer Commission was created by an act of the Massachusetts legislature. That means BWSC just turned thirty. Now is the time to take stock of what BWSC has accomplished these past three decades.

The word that best defines what BWSC has accomplished is conservation. In fact, you can think of it as 30 years of conservation—conservation of the natural resources that are vital to the quality of life of Boston's residents and the economic vitality of its businesses, and conservation of the financial resources BWSC needs to operate efficiently and effectively.

What may best sum up BWSC's dedication to conserving our natural and financial resources is a single set of comparative statistics. When BWSC was created in 1977 Boston's water distribution system was losing 70 million gallons of water every day through leaks and illegal connections. Today, the total amount of water BWSC purchases from the Massachusetts Water Resources Authority is just 71 million gallons daily. As a city, we use almost the same amount of water today as was being lost 30 years ago.

This is a great accomplishment. For those millions of gallons of water don't just represent a precious natural resource. They also represent millions of dollars of savings. It is because we have been so aggressive reducing unaccounted-for water that we have been able to maintain our rates at the levels we have. In the last fourteen years, our operating expenses have risen only \$12 million, despite a rate of inflation roughly twice that. In fact, against inflation BWSC spends 18% less on operating expenses today than it did 14 years ago.



Left to Right: Vincent G. Mannering, Executive Director;  
Dennis DiMarzio, Chair, Board of Commissioners;  
Cathleen Douglas Stone, Commissioner;  
and Muhammad Ali-Salaam, Commissioner

Mayor Menino's leadership has been essential to our efforts to conserve your water and your money. Under his sustained leadership BWSC will continue to live up to its motto—Customer Service is our #1 priority—and we will do it as efficiently and effectively as possible.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Vincent Mannering'.

Vincent Mannering  
Executive Director



BOSTON WATER AND SEWER COMMISSION

# A LEADER IN CONSERVATION

## THE FOUNDATION

BWSC's remarkable ability to conserve our natural and financial resources starts in the ground, where more than 1,000 miles of pipe carry water to homes and businesses throughout Boston. The city's water distribution system first opened in 1848 and by the time BWSC was created a large number of the pipes in the system were in disrepair. This was one of the primary reasons so much water was being lost.

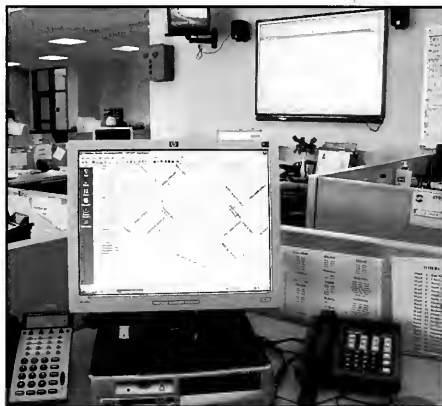


Beginning in 1979, BWSC began systematic efforts to reline and replace its problem pipes. In 1984, BWSC began outlining these efforts in its Capital Improvement Program, which had as a stated goal that any main in the system more than a century old would be relined or replaced by 2010. BWSC is well on its way to meeting its goal, having relined or replaced more than 500 miles of water main since its first efforts back in 1979. As a result, Boston enjoys one of the lowest rates of water main breaks of any large city in the country.

## THE ORGANIZATION

When BWSC was first enabled by the Massachusetts legislature back in 1977, it relied on separate water and sewer departments to operate and maintain the water distribution and wastewater collection systems. The results were inefficiency and high costs. In 1995, BWSC began training its Operations employees in both water and sewer system maintenance and operation. Overtime costs were reduced, as was the number of full-time employees hired by BWSC. Through retirement and natural attrition, BWSC's workforce shrank from more than 600 to less than 500 employees, a reduction only made possible by the greater skill and productivity of BWSC's current employees.

BWSC is now a leaner, more responsive organization. Both the Engineering and Operations Divisions are integrated units whose employees are trained to perform a broad range of field service and to respond to all types of emergencies. As a result, BWSC is better able to deploy its workforce as it responds more rapidly and more effectively to customer requests.



## THE TECHNOLOGY

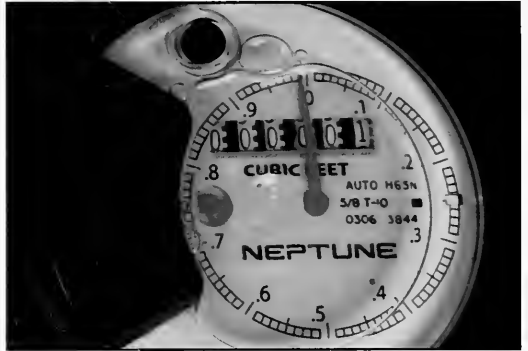
In 1977 few people could then imagine what the world, and specifically the world of business and the technologies companies and agencies use to meet customers needs, would be like. The internet, personal computers, roaming communications technology—these were the ideas of science fiction, not customer service. Of course, the world has changed at an ever accelerating pace the last thirty years. To ensure that it fulfills its promise to make customer service its #1 priority, BWSC has changed with the times.

Some of the changes just make good business sense. BWSC's Customer Information and Billing system tracks customer requests. An intranet allowed BWSC employees to communicate with one another more efficiently. The BWSC website, which first came online in 1998, allows customers to pay their bills electronically, saving them time. It even allows customers to track their water use. And a new database allows

## BOSTON WATER AND SEWER COMMISSION

BWSC employees to track inventory so that supplies—everything from pipe joints to safety equipment—are purchased and used more efficiently, saving BWSC and its customers money.

These changes were made as part of a 5-year technology plan first outlined in 1996 and updated in 2001. By anticipating the technology required to meet customer needs, BWSC was able to plan to meet the technology's cost, mitigating it through incorporation in BWSC's Capital Improvement Program.



## THE RESOURCES

As part of its second 5-year technology plan, BWSC completed installation of an automated meter reading (AMR) system. Before its installation, BWSC's customers could expect to have their meters read just every other month. Today, through the remote technology the AMR system uses, every meter in the BWSC system is read four times daily.

The results speak for themselves. The AMR system has eliminated the need for estimated bills, previously the most common complaint BWSC received from customers. The system also allows BWSC to track water consumption more closely and alert customers of unexpected consumption spikes, which might indicate a leak in the internal plumbing. BWSC has also used the AMR system to identify unaccounted-for water.



Looking to the future, BWSC is in the process of purchasing devices that listen remotely for water main leaks. The listening devices can pinpoint leaks so that, not only is water saved, but the work needed to repair any leaks is isolated. It is just one more example of BWSC's commitment to conserving our natural and financial resources.

## THE ENVIRONMENT

Water isn't the only natural resource BWSC has worked so hard for three decades to help conserve. BWSC doesn't just distribute the water Boston's residents and businesses drink, cook and clean with; it also collects the wastewater they produce and the storm water that falls as rain, sleet and snow. When Boston's original sewer system was built almost two centuries ago, environmental protection wasn't a priority. As a result, most of it combined wastewater and storm water. When the state's wastewater treatment plants came on line—first at Plum and then at Deer Island—Boston's combined sewers ran to them.

The combined sewer system was for the most part large enough to accommodate Boston's sewage and as long as it didn't rain there was rarely ever a problem. If it rained, however, the combined wastewater and storm water often exceeded the carrying capacity of the system; the overflow was designed to empty directly into Boston Harbor and its tributaries at 53 designated overflow sites across the city. The result was point source pollution and water that was unsafe to swim in.

As part of the Capital Improvement Program instituted in 1984, BWSC, in addition to replacing or relining old water mains, has worked to separate combined sewers, dramatically reducing overflow events, work for which BWSC has been recognized as an environmental steward by the Boston Harbor Association. 30 years of conservation includes protecting Boston's harbor, rivers and beaches.





## THE BOTTOM LINE

BWSC's long-term efforts to maintain its physical assets, streamline its organization, and maximize productivity through the latest technology have paid off, quite literally. In 1994, BWSC's operating expenses were \$44.4 million; in 2007, they were just \$50.6 million, almost \$12 million less against inflation over the same period of time. In real dollars, BWSC spent less in 2007 than it did in 1994. Not only that, BWSC's operating expenses have come in under budget in each of the last 14 years. BWSC doesn't spend money just because it budgets it; it spends money only when it needs to. That's part of conservation.

Of course, the bulk of BWSC's budget are not operating expenses. They include debt service obligations and Massachusetts Water Resource Authority assessments. Even there, though, the story is one of conservation. From 1995 to 2008, total BWSC expenses rose at a rate \$3 million slower than inflation, this despite increases in the MWRA assessment \$20 million above inflation. In fact, if one removes MWRA assessments from the equation, BWSC's total expenses have risen \$22 million less than inflation. In fact, between 1998 and 2006, total expenses other than MWRA assessments actually fell. That is conservation, plain and simple.





ANNUAL REPORT 2007

# **BOSTON WATER AND SEWER COMMISSION**

**Financial Statements,  
Required Supplementary Information,  
and Supplemental Schedules**

**December 31, 2007 and 2006  
(With Independent Auditors' Report Thereon)**



# INDEPENDENT AUDITOR'S REPORT

## THE COMMISSIONERS BOSTON WATER AND SEWER COMMISSION

We have audited the accompanying statements of net assets of the Boston Water and Sewer Commission (the Commission) as of December 31, 2007 and 2006, and the related statements of operations and cash flows for the years then ended. These financial statements are the responsibility of the Commission's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Commission's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Commission at December 31, 2007 and 2006, and the results of its operations and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

As described in note 9, the Commission, in fiscal 2007, implemented Governmental Accounting Standards Board (GASB) Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*.

The Management's Discussion and Analysis on pages 2 through 6 and the Schedule of Funding Progress—OPEB on page 33 are not required parts of the basic financial statements, but are supplementary information required by U.S. generally accepted accounting principles. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on them.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements. The accompanying other supplemental information is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in our audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

**KPMG LLP**

August 28, 2008

# MANAGEMENT'S DISCUSSION AND ANALYSIS

Required Supplementary Information,  
December 31, 2007 and 2006  
(Unaudited)

## OVERVIEW

Upon its creation in 1977, the Boston Water and Sewer Commission (the Commission) assumed the responsibility to provide water distribution, wastewater collection and storm water drainage services in the City of Boston (the City).

The Commission has realized a rate basis surplus from its operation in each year since its inception. In accordance with the Boston Water and Sewer Reorganization Act of 1977, the Commission applies surpluses to reduce its rates in succeeding years.

To accommodate the rate making process, the Commission follows the accounting standards set forth in Statement of

Financial Accounting Standards (SFAS) No. 71. SFAS No. 71 allows certain (a) revenues provided for future allowable costs to be deferred until the costs are actually incurred (deferred credits) and (b) costs incurred to be capitalized if future recovery is reasonably assured (deferred charges).

The statements of net assets provide information on the assets and liabilities of the Commission, with net assets reported as the difference between assets and liabilities. The statements of operations of the Commission reflect all revenues earned and all expenses incurred.

Condensed financial information for the most recent fiscal years is presented in this section of the report.

## CONDENSED FINANCIAL INFORMATION

(in thousands)

	2007	2006	2005
Current assets	\$ 38,912	35,105	32,611
Capital assets, net	922,399	872,518	795,417
Other assets	<u>207,757</u>	<u>216,671</u>	<u>245,774</u>
Total assets	<u>1,169,068</u>	<u>1,124,294</u>	<u>1,073,802</u>
Current liabilities	92,876	75,580	40,672
Noncurrent liabilities	<u>773,007</u>	<u>759,125</u>	<u>757,781</u>
Total liabilities	<u>865,883</u>	<u>834,705</u>	<u>798,453</u>
Net assets			
Invested in capital assets, net of related debt	533,178	516,473	470,599
Restricted net assets	83,734	83,184	82,702
Unrestricted net deficit	<u>(314,727)</u>	<u>(310,068)</u>	<u>(277,952)</u>
Total net assets	<u>\$ 303,185</u>	<u>289,589</u>	<u>275,349</u>

During the year, the Commission saw a slight increase in total assets and in total liabilities, resulting in an increase in total net assets of \$13.6 million, or 4.7%. In 2006, net assets totaled \$289.6 million, an increase of \$14.2 million, or 5.2% from 2005. The Commission's 2007 operations resulted in a budgetary surplus of approximately \$81,000, compared to approximately \$134,000 in 2006 and \$600,000 in 2005.

The Commission invested in various capital assets, including capital improvement projects, machinery and equipment, buildings, and improvements. These investments, net of accumulated depreciation, totaled \$922.4 million, which is 5.7% higher than in 2006. In 2006, these investments totaled \$872.5 million, an increase of \$77.1 million, or 9.7% over the 2005 total investment in capital assets. These increases in capital assets are the result of continuous upgrade of the Commission owned water and sewer infrastructure.

Total operating revenues in 2007 were \$261.9 million, which is 7.0% greater than in 2006. Total operating revenues in 2006 were \$244.8 million, which is 2.4% greater than in 2005. Operating revenues consist of water and sewer revenue, late charge revenue, fire pipe revenue and other income. Water and sewer revenue in 2007, 2006

and 2005 represented 96.6%, 95.1% and 90.0% of total operating revenues, respectively. The increases in 2007 and 2006 operating revenues were primarily driven by a 9.25% and 9.85% average rate increase, respectively.

Total operating expenses in 2007 were \$239.0 million, which represents an increase of 7.0% from 2006. The increase in 2007 operating expenses was primarily due to a 3.6%, or \$5.6 million, increase in the Massachusetts Water Resources Authority (MWRA) assessment coupled with a \$6.0 million expense that reflects the Commission's actuarially required contribution for postemployment benefits other than pensions calculated in accordance with GASB Statement No. 45, which was implemented in 2007. Total operating expenses in 2006 were \$223.3 million, which represents an increase of 4.1% from 2005. This increase in 2006 expenses was almost exclusively driven by an increase in the MWRA assessment. Operating expenses consist of operations and maintenance, MWRA assessment, and depreciation and amortization. The MWRA assessment is the largest expense incurred by the Commission, representing 66.8% in 2007 and 68.6%, in both 2006 and 2005 of total operating expenses.

#### CONDENSED FINANCIAL INFORMATION (in thousands)

	2007	2006	2005
Operating revenues			
Water and sewer usage	\$ 252,920	232,827	215,212
Other	8,964	11,980	23,874
Operating expenses	<u>238,979</u>	<u>223,294</u>	<u>214,399</u>
Excess operating revenues	22,905	21,513	24,687
Investment income	13,735	10,889	9,051
Interest expense	<u>(19,188)</u>	<u>(17,877)</u>	<u>(17,886)</u>
Total nonoperating net expense	<u>(5,453)</u>	<u>(6,988)</u>	<u>(8,835)</u>
Excess revenues before capital grants and contributions and transfer requirements	17,452	14,525	15,852
Capital grants and contributions	21,454	18,649	34,645
Excess revenues used to fund reserves and other deferrals	(25,363)	(19,382)	(19,734)
Change in accumulated revenues used to offset future rates	<u>53</u>	<u>448</u>	<u>7,196</u>
Change in net assets	13,596	14,240	37,959
Net assets, beginning of year	<u>289,589</u>	<u>275,349</u>	<u>237,390</u>
Net assets, end of year	<u>\$ 303,185</u>	<u>289,589</u>	<u>275,349</u>

MANAGEMENT’S DISCUSSION  
AND ANALYSIS, continued

CAPITAL ASSETS

In fiscal year 2007, major Commission project additions totaled \$40.9 million, of which \$21.3 million was financed with bond proceeds. Major project expenditures (in thousands) are as follows:

Relay of water mains	\$ 18,100
Reline of water mains	5,400
Rehabilitation/replacement of sewers or storm drains	10,200
Interceptor improvements	200
Separation of combined sewers	6,000
Infiltration and inflow	600
Meter replacement	<u>400</u>
	<u>\$ 40,900</u>

The Commission’s 2008–2010 capital budget includes projected expenditures of \$183.2 million for infrastructure and capital projects. The major projects are for the rehabilitation of water mains and the replacement/rehabilitation of the sewer system. Some water projects are financed on a pay-as-you-go basis combined with an interest free loan for water rehabilitation provided by the MWRA. The majority of the sewer improvements along with the installation of a new radio frequency meter reading system will be financed through bond proceeds. However there are sewer improvements that are funded through the utilization of the MWRA loan programs. Please refer to footnote 3 for more detailed capital asset activity.

DEBT PLAN

The Commission is empowered by the Boston Water and Sewer Reorganization Act of 1977 (the Enabling Act) to issue bonds and notes payable solely constituted on the general obligation of the Commission. The Commission has no legal restrictions concerning the amount of debt which it may have outstanding, subject to the coverage requirements described below.

The Commission issues General Revenue Bonds to finance portions of its capital improvement projects. The Commission’s 2008–2010 capital budget, which totals \$183.2 million, anticipates that projects totaling \$118.9 million, or 64.9% of the Commission’s 2008–2010 capital budget, will be funded from bond proceeds. The 2008 budget for debt service is \$36.9 million.

The Commission currently has nine series of General Revenue Bonds outstanding at the end of 2007, totaling approximately \$307.3 million as follows (in thousands):

\$ 30,810	1992 Series A
46,735	1993 Series A
30,700	1994 Series A
12,960	1998 Series A
11,210	1998 Series C
109,030	1998 Series D
15,215	2003 Series A
<u>50,685</u>	2004 Series A
<u>\$ 307,345</u>	

The Commission did not issue any General Revenue Bonds in 2007 or 2006. Please refer to footnote 4 for more detailed long-term debt activity.

### DEBT SERVICE COVERAGE REQUIREMENTS

The Commission's bond covenants require that rates and charges be at least sufficient to provide revenues (i) to pay all current expenses of the Commission, (ii) to pay the principal of, premium if any, and interest on all bonds issued by the Commission as they become due and payable, (iii) to create and maintain such reasonable reserves as may be reasonably required by any trust agreement or resolution securing bonds, (iv) to provide funds for paying the cost of all necessary repairs, replacements and renewal of the systems and (v) to pay or provide for any and all amounts which the Commission may be obligated to pay or provide for by law or contract. The Commission is also required to establish and maintain rates and charges at levels sufficient so that total net revenues in each year during which bonds are outstanding will equal at least 125% of (1) the bond debt service requirement during such year less (2) the amount, if any, of bond proceeds available to pay interest becoming due in such year on bonds outstanding as of the first day of such year. The Commission has exceeded the 125% debt service coverage requirement of the Resolution in each year since its inception in 1977.

### ADDITIONAL BONDS AND REFUNDING BONDS

The Enabling Act permits the issuance of additional bonds for paying the cost of any project, making deposits in various funds established under the Enabling Act, paying costs of issuance, paying the principal, premium and interest on any notes issued in anticipation of additional bonds, or any combination of the above.

Refunding bonds may also be issued by the Commission only upon certifying that the aggregate debt service in each fiscal year in which Refunding Bonds are outstanding will not be increased as a result of the issuance of the Refunding Bonds; provided that, in lieu of such certification, the Commission may deliver to the Trustee certificates satisfying the conditions described above for the issuance of additional bonds.

### BUDGETS AND RATES

The Commission from 1994 to 2001 was able to maintain its water and sewer rates to its customers without an increase. Additionally, the Commission is required by law to be self sustaining, to set its rates at a level sufficient to cover expenses and debt service requirements each year.

In 2006, the Commission modified its inclining block rate structure. The number of rate blocks was reduced from ten to six, thereby making the structure easier to understand for customers while still promoting water conservation and generating sufficient revenue. In addition, average water and sewer rates were increased by 9.85%. In 2007, the Commission increased its water and sewer rates by an average of 9.25%. The major reasons behind these increases were: (i) the increase in assessment paid to the Massachusetts Water Resource Authority (MWRA), and (ii) the decline in water sales due to general water conservation efforts of individuals and businesses throughout the City.

Effective January 1, 2008, the Commission increased its water and sewer rates by an average of 5.6 %.

### CREDIT RATINGS

The Commission's revenue bonds are rated "Aa2" by Moody's Investors Service and "AA" by FitchRatings.

### CONTACTING THE COMMISSION'S FINANCIAL MANAGEMENT

The report is designed to provide our bondholders, customers and other interested parties with a general overview of the Commission's finances and to demonstrate the Commission's accountability for the revenue it receives. If you have questions about this report or need additional information, contact the Boston Water and Sewer Commission, Finance Department, 980 Harrison Avenue, Boston, MA 02119.

# BOSTON WATER AND SEWER COMMISSION

## STATEMENTS OF NET ASSETS

December 31, 2007 and 2006

<b>ASSETS</b>	<b>2007</b>	<b>2006</b>
Current assets:		
Cash and cash equivalents (note 9)	\$ 5,478,302	6,782,025
Accounts receivable, net:		
Customers, less allowances of \$2,839,653 in 2007 and 2006 (note 1)	18,600,179	16,842,215
Unbilled revenues, less allowances of \$1,702,361 in 2007 and 2006	14,137,162	10,889,490
Construction grants receivable	106,830	19,535
Prepaid expenses	589,418	571,537
Total current assets	<u>38,911,891</u>	<u>35,104,802</u>
Noncurrent assets:		
Restricted cash and investments (notes 4 and 9)	189,695,465	197,050,990
Capital assets (note 3):		
Depreciable, net	710,502,784	663,745,646
Nondepreciable	211,896,567	208,772,337
Deferred charges (note 2)	16,617,577	17,997,808
Bond issue costs, net	1,443,609	1,622,841
Total noncurrent assets	<u>1,130,156,002</u>	<u>1,089,189,622</u>
<b>TOTAL ASSETS</b>	<u>1,169,067,893</u>	<u>1,124,294,424</u>
<b>LIABILITIES</b>		
Current liabilities:		
Payable from current assets:		
Accounts payable	18,060,589	24,645,796
Other accrued liabilities	5,746,352	5,364,015
Commercial paper notes (note 5)	46,600,000	25,000,000
Current portion of long-term notes (note 4)	9,644,216	8,215,519
Current portion of revenue bonds (note 4)	12,825,000	12,355,000
Total current liabilities	<u>92,876,157</u>	<u>75,580,330</u>
Noncurrent liabilities:		
Long-term debt, net (note 4)	292,901,305	305,080,221
Long-term notes payable (note 4)	45,285,880	47,362,938
Other long-term liabilities	7,627,510	4,799,712
Deferred credits and reserves (note 2)	427,191,776	401,882,354
Total noncurrent liabilities	<u>773,006,471</u>	<u>759,125,225</u>
<b>TOTAL LIABILITIES</b>	<u>865,882,628</u>	<u>834,705,555</u>
<b>NET ASSETS</b>		
Net assets:		
Invested in capital assets, net of related debt	533,177,676	516,472,664
Restricted for debt service	38,722,718	37,618,370
Restricted for capital assets	699,800	—
Restricted for debt covenants	45,312,437	45,565,644
Unrestricted net deficit	(314,727,366)	(310,067,809)
Commitments and contingencies (notes 11, 12, and 13)		
<b>TOTAL NET ASSETS</b>	<u>\$ 303,185,265</u>	<u>289,588,869</u>

See accompanying notes to financial statements.



# STATEMENTS OF OPERATIONS

Years ended December 31, 2007 and 2006

	2007	2006
Operating revenues:		
Water and sewer usage (note 7)	\$ 252,920,327	232,826,975
Fire pipe	3,595,899	3,469,844
Other (note 1)	<u>5,367,899</u>	<u>8,509,793</u>
Total operating revenues	<u>261,884,125</u>	<u>244,806,612</u>
Operating expenses:		
Operations	53,882,665	49,045,154
Maintenance	6,582,756	4,181,233
MWRA assessment (note 6)	159,736,851	154,135,878
Depreciation and amortization	<u>18,776,772</u>	<u>15,931,900</u>
Total operating expenses	<u>238,979,044</u>	<u>223,294,165</u>
Excess operating revenues	<u>22,905,081</u>	<u>21,512,447</u>
Nonoperating revenue (expense):		
Investment income	13,735,219	10,888,561
Interest expense	<u>(19,188,062)</u>	<u>(17,876,667)</u>
Total nonoperating net expense	<u>(5,452,843)</u>	<u>(6,988,106)</u>
Excess revenues before capital grants and contributions and transfer requirements	17,452,238	14,524,341
Capital grants and contributions	<u>21,453,580</u>	<u>18,649,193</u>
Excess revenues before transfer requirements	38,905,818	33,173,534
Excess revenues used to fund reserves and other deferrals (note 2)	(25,362,776)	(19,382,031)
Change in accumulated revenues used to offset future rates (note 2)	<u>53,354</u>	<u>448,184</u>
Change in net assets	13,596,396	14,239,687
Net assets, beginning of year	<u>289,588,869</u>	<u>275,349,182</u>
Net assets, end of year	<u>\$ 303,185,265</u>	<u>289,588,869</u>

See accompanying notes to financial statements.

# BOSTON WATER AND SEWER COMMISSION

## STATEMENTS OF CASH FLOWS

Years ended December 31, 2007 and 2006

	2007	2006
Cash flows from operating activities:		
Receipts from customers	\$ 256,878,489	240,688,601
Payments to suppliers	(184,655,416)	(173,583,733)
Payments to employees	(34,287,435)	(33,051,556)
Net cash provided by operating activities	<u>37,935,638</u>	<u>34,053,312</u>
Cash flows from investing activities:		
Investment income	13,735,219	10,888,561
Sales of investments	63,195,131	181,608,643
Purchases of investments	(56,569,075)	(153,871,720)
Net cash provided by investing activities	<u>20,361,275</u>	<u>38,625,484</u>
Cash flows from capital and related financing activities:		
Purchase of capital assets	(71,668,695)	(86,604,778)
Proceeds from debt	7,567,158	7,974,391
Payment of bond principal	(20,570,519)	(19,061,786)
Proceeds from commercial paper	152,800,000	25,000,000
Paydown of commercial paper	(131,200,000)	—
Capital contributions	21,453,580	18,649,193
Payment of bond interest	(17,982,160)	(17,158,015)
Net cash used in capital and related financing activities	<u>(59,600,636)</u>	<u>(71,200,995)</u>
Net increase	(1,303,723)	1,477,801
Cash, cash equivalents, beginning of year	<u>6,782,025</u>	<u>5,304,224</u>
Cash, cash equivalents, end of year	<u>\$ 5,478,302</u>	<u>6,782,025</u>
Reconciliation of operating income to net cash provided by operating activities:		
Excess operating revenues	\$ 22,905,081	21,512,447
Adjustment to reconcile operating income to net cash:		
Reserves released to stabilize rates	—	(3,096,732)
Depreciation and amortization	18,776,772	15,931,900
Postemployment health insurance	3,200,000	—
Changes in assets and liabilities:		
Accounts receivable, net	(1,757,964)	125,391
Unbilled revenues	(3,247,672)	(1,127,135)
Construction grants receivable	—	(19,535)
Prepaid expenses	(17,881)	5,487
Accounts payable	(2,019,097)	3,632,693
Other accrued liabilities	468,601	(388,918)
Other long-term liabilities	(372,202)	(2,522,286)
Net cash provided by operating activities	<u>\$ 37,935,638</u>	<u>34,053,312</u>

Noncash capital and related financing activities:

Noncash purchases of capital assets totaled \$7,727,043 and \$12,293,152 in 2007 and 2006, respectively.

See accompanying notes to financial statements.

# NOTES TO FINANCIAL STATEMENTS

December 31, 2007 and 2006

## (1) ORGANIZATION, BASIS OF PRESENTATION, AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Boston Water and Sewer Commission (the Commission) has the responsibility to provide water and wastewater services on a fair and equitable basis in the City of Boston (the City) as required under the Boston Water and Sewer Reorganization Act of 1977 (the Enabling Act).

Under the Enabling Act, the Commission is subject to regulation with respect to rates, accounting and other matters, where applicable, by the board of commissioners (the Board). The Board is appointed by the City's Mayor subject to confirmation by the City Council. It regulates the rates that the Commission can charge its customers for water and sewer usage. The rates charged to customers are based on the cash required for the Commission's operations, debt service, and reserve contributions. However, there is no legally adopted budget that the Commission must adhere to. To comply with the external financial reporting requirements of the Board, the accompanying financial statements are presented on a

basis that is consistent with U.S. generally accepted accounting principles (GAAP) for regulated utilities (i.e., the accrual basis of accounting and the capital maintenance measurement focus).

To accommodate the rate making process, the Commission follows the accounting standards set forth in Statement of Financial Accounting Standards (SFAS) No. 71, *Accounting for the Effects of Certain Types of Regulation*. SFAS No. 71 allows certain board approved (a) revenues provided for future allowable costs to be deferred until the costs are actually incurred (deferred credits) and (b) costs incurred to be capitalized if future recovery is reasonably assured (deferred charges). Revenues and expenses appearing in the supplemental schedule of revenues and expenses—rate basis are presented in the same format as utilized in the Commission's operational budgeting and rate-setting process. The revenues and expenses shown on the statements of operations are presented on a GAAP basis. A reconciliation between the revenues and expenses of these two operating statements for the year ended December 31, 2007 is provided below:

---

	Revenues	Expenses
As presented in the statements of operations		
Operating revenues/expenses	\$ 261,884,125	238,979,044
Other revenues/expenses	<u>13,735,219</u>	<u>19,188,062</u>
Total	275,619,344	258,167,106
Reclassifications and deferrals:		
Contributions to reserves	—	3,971,000
GAAP adjustments	(7,334,500)	(10,534,500)
Excess bond payments over depreciation and amortization	—	(1,190,857)
Interest expense (escrowed funds)	—	(560,543)
Investment income (escrowed funds)	(4,905,019)	—
Capital expenditures	—	13,853,358
Excess revenue used to offset current rates	134,108	—
Other deferrals	<u>—</u>	<u>(272,385)</u>
As presented in the supplemental schedule, rate basis	<u>\$ 263,513,933</u>	<u>263,433,179</u>

---

## BOSTON WATER AND SEWER COMMISSION

The Enabling Act requires that any net surplus, as defined by the rate setting process, be either turned over to the City or applied to offset water and sewer rates for the following year. The Commission has applied \$80,754 and \$134,108 for the years ended December 31, 2007 and 2006, respectively, to offset rates in the respective subsequent years.

### (a) Revenue Billings

Water and sewerage fees are billed to users of the systems on a monthly cycle basis. Revenues are accrued for periods between the termination of billings for the various cycles and the end of the year. Some adjustments are made on a post-billing basis that reduce the amount of total billings. The total customer bills outstanding as of December 31, 2007 and 2006, respectively, were \$21,439,832 and \$19,681,868. These net billing amounts are reduced by an allowance for uncollectible accounts of \$2,839,653 in both 2007 and 2006 to arrive at the net accounts receivable.

### (b) Investments

Investments are stated at fair value. Fair value is determined based on quoted market prices.

### (c) Capital Assets

Capital assets are stated at historical cost. Depreciation is provided on the straight-line method based upon the estimated useful lives of the various classes of assets. Maintenance and repairs are charged to expense as incurred. Major renewals or betterments over \$500 are capitalized and depreciated over their estimated useful lives.

The Commission capitalizes interest costs during construction of assets for its own use. No interest was capitalized in 2007 or 2006 because the amount calculated was not material.

### (d) Compensated Absences

Various employees of the Commission accumulate unused sick time (subject to certain limitations) to be used at a later date or a percentage paid in cash upon voluntary resignation and/or retirement from the Commission (subject to Commission policies and/or bargaining agreements.) The liability for vacation leave is based on the amount earned but not used; for sick leave, it is based on a percentage of the amount accumulated at the statement of net assets dates. The liability for both amounts is calculated based on the pay or salary rates in effect at the statements of net assets dates.

### (e) Depreciation

The Commission provides for depreciation using the straight line method. Estimated useful lives used in computing depreciation are as follows:

	Years
Water:	
Works	100
Meters	10
Hydrants	40
Sewerage:	
Works	75
Pumping station	35
Buildings	40
Other	4 – 14

### (f) Cash Equivalents

The Commission considers all highly liquid, short-term cash investments with original maturities of three months or less to be cash equivalents for purposes of the statements of cash flows.

### (g) Bond Issue Costs

Expenses related to the issuance of bonds are amortized on a weighted average basis over the life of the bonds, which approximates the effective interest method.

### (h) Business-Type Activity Accounting and Financial Reporting

Under the Governmental Accounting Standards Board (GASB) Statement No. 20, *Accounting and Financial Reporting for Proprietary Activities*, the Commission has elected to apply all Financial Accounting Standards Board (FASB) statements and interpretations issued on or before November 30, 1989, except those that conflict with or contradict GASB pronouncements.

Business-type activity funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses result from providing services in connection with ongoing operations. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

**(i) Use of Estimates**

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities, at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**(j) Implementation of New Accounting Standards**

GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, requires governments to recognize other postemployment benefits (OPEB) when earned rather than on a pay-as-you-go basis. Governments with revenues greater than \$100 million are required to implement this standard for financial statement periods beginning after December 15, 2006. The Commission implemented this standard in the current year. See footnote 9.

**(2) DEFERRED CHARGES AND CREDITS**

As discussed in note 1, the application of SFAS No. 71 results in certain revenues and expenses being removed from the statements of operations and reflected in the statements of net assets as deferred charges or deferred credits. The revenues and expenses that have been removed from the statements of operations and added to the statements of net assets as deferred credits appear in the line "Excess revenues used to fund reserves and other deferrals" on the statements of operations. The components of these amounts are as follows:

	2007	2006
Contributions to reserves	\$ 3,971,000	568,000
Principal payments on long-term debt	19,969,755	18,527,795
Interest paid from escrow funds	(560,543)	(716,174)
Capital expenditures	13,853,358	11,232,964
Depreciation and amortization	(17,401,895)	(12,980,768)
Investment income on project and escrow funds	4,905,018	2,061,494
Other	<u>626,083</u>	<u>688,720</u>
	<u>\$ 25,362,776</u>	<u>19,382,031</u>

The activity in and components of deferred charges included in the accompanying statements of net assets are as follows:

	December 31, 2005	Increase/ (decrease)	December 31, 2006	Increase/ (decrease)	December 31, 2007
Deferred loss on land taking	\$ 5,305,600	(221,067)	5,084,533	(221,067)	4,863,466
Accrued pension expense	10,552,478	(676,282)	9,876,196	(898,465)	8,977,731
Debt extinguishment expense	<u>3,297,778</u>	<u>(260,699)</u>	<u>3,037,079</u>	<u>(260,699)</u>	<u>2,776,380</u>
Total deferred charges	<u>\$ 19,155,856</u>	<u>(1,158,048)</u>	<u>17,997,808</u>	<u>(1,380,231)</u>	<u>16,617,577</u>

## BOSTON WATER AND SEWER COMMISSION

The activity in and components of deferred credits and reserves included in the accompanying statements of net assets are as follows:

	December 31, 2005	Increase/ (decrease)	December 31, 2006	Increase/ (decrease)	December 31, 2007
Debt service	\$ 127,296,824	568,000	127,864,824	3,971,000	131,835,824
Capital improvements	241,195,285	18,814,031	260,009,316	21,391,775	281,401,092
Working capital	14,730,838	(3,096,732)	11,634,106	—	11,634,106
Self-insurance	2,240,000	—	2,240,000	—	2,240,000
	<u>385,462,947</u>	<u>16,285,299</u>	<u>401,748,246</u>	<u>25,362,775</u>	<u>427,111,021</u>
Reduction of future rates	<u>582,292</u>	<u>(448,184)</u>	<u>134,108</u>	<u>(53,354)</u>	<u>80,754</u>
Total deferred credits and reserves	\$ <u>386,045,239</u>	<u>15,837,115</u>	<u>401,882,354</u>	<u>25,309,422</u>	<u>427,191,776</u>

### (3) CAPITAL ASSETS

The cost and activity of water and sewerage capital assets in service and related accumulated depreciation at December 31, 2007 and 2006 is as follows:

	Balance at December 31, 2006	Increases	Decreases	Balance as of December 31, 2007
Capital assets, not being depreciated:				
Land	\$ 5,884,243	—	—	5,884,243
Construction in progress	<u>202,888,094</u>	<u>65,328,506</u>	<u>(62,204,276)</u>	<u>206,012,324</u>
Total capital assets not being depreciated	<u>208,772,337</u>	<u>65,328,506</u>	<u>(62,204,276)</u>	<u>211,896,567</u>
Capital assets, being depreciated:				
Buildings and improvements	66,502,512	—	—	66,502,512
Machinery and equipment	27,481,908	1,305,677	—	28,787,585
Infrastructure	<u>755,165,027</u>	<u>62,672,679</u>	<u>—</u>	<u>817,837,706</u>
Total capital assets being depreciated	<u>849,149,447</u>	<u>63,978,356</u>	<u>—</u>	<u>913,127,803</u>
Less accumulated depreciation for:				
Buildings and improvements	9,493,556	2,286,876	—	11,780,432
Machinery and equipment	21,516,278	1,592,644	—	23,108,922
Infrastructure	<u>154,393,967</u>	<u>13,341,698</u>	<u>—</u>	<u>167,735,665</u>
Total accumulated depreciation	<u>185,403,801</u>	<u>17,221,218</u>	<u>—</u>	<u>202,625,019</u>
Total capital assets being depreciated, net	<u>663,745,646</u>	<u>46,757,138</u>	<u>—</u>	<u>710,502,784</u>
Capital assets, net	\$ <u>872,517,983</u>	<u>112,085,644</u>	<u>(62,204,276)</u>	<u>922,399,351</u>

---

	Balance at December 31, 2005	Increases	Decreases	Balance at December 31, 2006
Capital assets, not being depreciated:				
Land	\$ 2,519,243	3,365,000	—	5,884,243
Construction in progress	<u>155,719,432</u>	<u>91,686,080</u>	<u>(44,517,418)</u>	<u>202,888,094</u>
Total capital assets not being depreciated	<u>158,238,675</u>	<u>95,051,080</u>	<u>(44,517,418)</u>	<u>208,772,337</u>
Capital assets, being depreciated:				
Buildings and improvements	65,599,726	902,786	—	66,502,512
Machinery and equipment	26,764,636	717,272	—	27,481,908
Infrastructure	<u>714,962,536</u>	<u>40,202,491</u>	<u>—</u>	<u>755,165,027</u>
Total capital assets being depreciated	<u>807,326,898</u>	<u>41,822,549</u>	<u>—</u>	<u>849,149,447</u>
Less accumulated depreciation for:				
Buildings and improvements	7,486,331	2,007,225	—	9,493,556
Machinery and equipment	19,873,525	1,642,753	—	21,516,278
Infrastructure	<u>142,788,327</u>	<u>11,605,640</u>	<u>—</u>	<u>154,393,967</u>
Total accumulated depreciation	<u>170,148,183</u>	<u>15,255,618</u>	<u>—</u>	<u>185,403,801</u>
Total capital assets being depreciated, net	<u>637,178,715</u>	<u>26,566,931</u>	<u>—</u>	<u>663,745,646</u>
Capital assets, net	\$ <u>795,417,390</u>	<u>121,618,011</u>	<u>(44,517,418)</u>	<u>872,517,983</u>

---

During 1999, the Boston Redevelopment Authority (BRA) took land owned by the Commission through eminent domain. The book value of the land, at the time of the taking, was \$7,598,710. A portion of this loss, \$6,632,000, of which \$4,863,466 and \$5,084,533 remain unamortized at December 31, 2007 and 2006, respectively, was included in deferred charges in the accompanying statements of net assets as that amount will be recovered through future rates. The Commission was paid no compensation for the land and does not expect to receive any consideration from BRA in the future.

## BOSTON WATER AND SEWER COMMISSION

### (4) LONG-TERM OBLIGATIONS

The Commission issues revenue bonds to support various projects.

The following is a summary of revenue bond activity for the years ended December 31, 2007 and 2006 (amounts in thousands).

DESCRIPTION	Balance at December 31, 2006	Additions	Reductions	Balance at December 31, 2007	Amounts due within one year
Revenue bonds:					
1992 Series A, bearing interest rates ranging from 6.1% to 5.75%, with maturity dates ranging from November 1, 2008 to 2013	\$ 30,810	—	—	30,810	4,445
1993 Series A, bearing interest rates ranging from 5.125% to 5.25%, with maturity dates ranging from November 1, 2012 to 2019	46,735	—	—	46,735	—
1994 Series A, bearing a variable interest rate, with maturity dates ranging from November 1, 2008 to 2024	31,700	—	1,000	30,700	1,000
1998 Series A, bearing interest rates ranging from 5.0% to 5.125%, with maturity dates ranging from November 1, 2014 to 2015	12,960	—	—	12,960	—
1998 Series C, bearing interest rates ranging from 4.5% to 5.2%, with maturity dates ranging from 2008 to 2021	11,220	—	10	11,210	10
1998 Series D, bearing interest rates ranging from 4.625% to 5.0%, with maturity dates ranging from November 1, 2008 to 2028	112,020	—	2,990	109,030	3,130
2002 Series A, bearing interest rates ranging from 3.0% to 3.0%, with maturity dates of November 1, 2007	4,000	—	4,000	—	—
2003 Series A, bearing interest rates ranging from 2.5% to 4.0%, with maturity dates ranging from November 1, 2008 to 2011	18,800	—	3,585	15,215	3,690
2004 Series A, bearing interest rates ranging from 3.0% to 5.0%, with maturity dates ranging from November 1, 2008 to 2025	<u>51,455</u>	<u>—</u>	<u>770</u>	<u>50,685</u>	<u>550</u>
	319,700	—	12,355	307,345	12,825
Plus (less) unamortized loss on refunding	(3,013)	—	(759)	(2,254)	—
Plus (less) unamortized issue discount	<u>748</u>	<u>—</u>	<u>113</u>	<u>635</u>	<u>—</u>
Net revenue bonds	\$ <u>317,435</u>	<u>—</u>	<u>11,709</u>	<u>305,726</u>	<u>12,825</u>



DESCRIPTION	Balance at December 31, 2005	Additions	Reductions	Balance at December 31, 2006	Amounts due within one year
Revenue bonds:					
1992 Series A, bearing interest rates ranging from 6.1% to 5.75%, with maturity dates ranging from November 1, 2008 to 2013	\$ 30,810	—	—	30,810	—
1993 Series A, bearing interest rates ranging from 5.125% to 5.25%, with maturity dates ranging from November 1, 2012 to 2019	46,735	—	—	46,735	—
1994 Series A, bearing a variable interest rate, with maturity dates ranging from November 1, 2007 to 2024	32,600	—	900	31,700	1,000
1998 Series A, bearing interest rates ranging from 5.0% to 5.125%, with maturity dates ranging from November 1, 2014 to 2015	12,960	—	—	12,960	—
1998 Series C, bearing interest rates ranging from 4.5% to 5.2%, with maturity dates ranging from 2007 to 2021	11,230	—	10	11,220	10
1998 Series D, bearing interest rates ranging from 4.625% to 5.0%, with maturity dates ranging from November 1, 2007 to 2028	114,875	—	2,855	112,020	2,990
2002 Series A, bearing interest rates ranging from 3.0% to 3.0%, with maturity dates of November 1, 2007	7,880	—	3,880	4,000	4,000
2003 Series A, bearing interest rates ranging from 2.5% to 4.0%, with maturity dates ranging from November 1, 2007 to 2011	22,295	—	3,495	18,800	3,585
2004 Series A, bearing interest rates ranging from 3.0% to 5.0%, with maturity dates ranging from November 1, 2007 to 2025	<u>52,245</u>	<u>—</u>	<u>790</u>	<u>51,455</u>	<u>770</u>
	331,630	—	11,930	319,700	12,355
Plus (less) unamortized loss on refunding	(3,806)	—	(793)	(3,013)	—
Plus (less) unamortized issue discount	<u>916</u>	<u>—</u>	<u>168</u>	<u>748</u>	<u>—</u>
Net revenue bonds	\$ <u>328,740</u>	<u>—</u>	<u>11,305</u>	<u>317,435</u>	<u>12,355</u>

## BOSTON WATER AND SEWER COMMISSION

Annual sinking fund requirements and debt principal and interest maturities for all future years as of December 31, 2007 are as follows (amounts in thousands):

### REVENUE BONDS

	Principal	Interest
2008	\$ 12,825	15,629
2009	13,430	15,020
2010	14,080	14,368
2011	14,775	13,669
2012	15,530	12,917
2013-2017	83,715	51,570
2018-2022	88,530	29,317
2023-2027	56,445	9,015
2028-2030	8,015	334
	<u>\$ 307,345</u>	<u>161,839</u>

#### (a) Prior Year Debt Refunding

In the aggregate, \$145,220,000 remains outstanding at December 31, 2007, on the bond issues that were defeased "in-substance" during prior years.

#### (b) Restricted Cash and Investments

The Commission has established both trustee and non-trustee funds with investments, principally short-term securities, which are restricted for payment of specified liabilities, capital projects, or other costs of operations. The components of the trustee and non-trustee investments at December 31, 2007 and 2006 are as follows:

	2007	2006
Trustee:		
Other government obligations	\$ 142,074,337	94,545,865
Money market and cash investments	1,419,253	1,851,322
Open-ended mutual funds	2,465,285	640,150
Commercial paper	—	39,024,983
Repurchase agreements	<u>11,746,250</u>	<u>11,746,250</u>
	<u>\$ 157,705,125</u>	<u>147,808,570</u>

	2007	2006
Non-trustee:		
U.S. Government Agencies	\$ 6,116,898	119,902
Money market and cash investments	9,104,046	19,578,975
Open-ended mutual funds	16,769,396	19,729,318
Commercial paper	—	9,814,225
	<u>31,990,340</u>	<u>49,242,420</u>
Restricted cash and investments	189,695,465	197,050,990
Less trustee and non-trustee cash	(10,523,299)	(21,430,297)
Trustee and non-trustee investments	<u>\$ 179,172,166</u>	<u>175,620,693</u>

The Commission's bond resolution requires certain accounts to maintain a minimum balance at all times. The resolution allows the Commission to utilize surety bonds where the issuer maintains a minimum credit rating of an "AA" or equivalent towards the minimum balance in the senior debt service reserve account. Subsequent to year-end, the surety bond provider was downgraded to below an "AA" or equivalent. In response to the downgrade, with Board approval, the Commission transferred cash to the senior debt service reserve account to fund the difference. The bond resolution is silent on the amount of time to fund a reserve shortfall, however, it does define an event of default as any violation of the bond resolution that is not resolved in 30 days or, if that period is not adequate, as expeditiously as possible in whatever reasonable period of time is required. The Commission funded the shortfall within 42 calendar days.

#### (c) Long-Term Notes Payable

During 1997 and 1996, the Commission executed loan agreements with the Massachusetts Water Pollution Abatement Trust (MWPAT) to finance and refinance a portion of the Commission's water pollution abatement projects. For purposes of offsetting principal and interest payments, an amount aggregating approximately \$7,797,000 as of December 31, 2007, consisting of contract assistance payments from the Commonwealth of Massachusetts and other interest subsidies from MWPAT, will be recognized as capital grants over the remaining term of the loans.

The scheduled loan payments for all MWPAT obligations and related subsidies are shown below as of December 31, 2007 (amounts in thousands):

	Principal	Interest	Total	Equity earnings	Contract assistance payments	Total	Principal	Interest	Total
2008	\$ 1,750	705	2,455	347	815	1,162	1,130	172	1,302
2009	1,825	623	2,448	309	815	1,124	1,186	145	1,331
2010	1,894	543	2,437	271	801	1,072	1,235	125	1,360
2011	1,971	459	2,430	230	801	1,031	1,290	103	1,393
2012	2,057	372	2,429	188	804	992	1,354	80	1,434
2013–2017	6,485	660	7,145	346	2,070	2,416	4,595	98	4,693
	<u>\$ 15,982</u>	<u>3,362</u>	<u>19,344</u>	<u>1,691</u>	<u>6,106</u>	<u>7,797</u>	<u>10,790</u>	<u>723</u>	<u>11,513</u>

The Commission has entered into various interest free loan agreements with the MWRA. Under these agreements, the Commission is required to repay these loans in annual installments as part of the MWRA's Infiltration/Inflow Local Financial Assistance program (I/I), Local Water Infrastructure Rehabilitation Program (WIR) and Pipeline Assistance Program (PAP). These programs are designed to assist service area communities with sewer system rehabilitation.

The following is a summary of long term note activities for the years ended December 31, 2007 and 2006.

Description	Balance at December 31, 2006	Additions	Reductions	Balance at December 31, 2007	Amounts due within one year
MWRA I/I Program Phase III, interest free, due August 15, 2010	\$ 2,602,616	—	881,806	1,720,810	881,806
MWRA I/I Program Phase IV, interest free, due February 15, 2012	4,345,436	3,035,807	1,345,655	6,035,588	1,952,817
MWRA I/I Program Phase V, interest free, due November 15, 2012	—	2,968,351	—	2,968,351	593,670
MWRA P.A.P. Program, interest free, due November 15, 2017	30,970,575	1,563,000	4,309,993	28,223,582	4,466,293
MWPAT Pool I, subsidized interest, due August 1, 2013	5,164,611	—	654,144	4,510,467	678,894
MWPAT Pool II, subsidized interest, due August 1, 2015	4,992,828	—	437,504	4,555,324	464,301
MWPAT Pool III, subsidized interest, due February 1, 2017	7,502,391	—	586,417	6,915,974	606,435
Total long-term notes	<u>\$ 55,578,457</u>	<u>7,567,158</u>	<u>8,215,519</u>	<u>54,930,096</u>	<u>9,644,216</u>

## BOSTON WATER AND SEWER COMMISSION

Description	Balance at December 31, 2005	Additions	Reductions	Balance at December 31, 2006	Amounts due within one year
MWRA I/I Program Phase III, interest free, due August 15, 2010	\$ 3,484,422	—	881,806	2,602,616	881,806
MWRA I/I Program Phase IV, interest free, due May 15, 2011	3,510,382	1,817,258	982,204	4,345,436	1,345,655
MWRA P.A.P. Program, interest free, due November 15, 2016	28,507,722	6,157,133	3,694,280	30,970,575	4,309,993
MWPAT Pool I, subsidized interest, due August 1, 2013	5,754,450	—	589,839	5,164,611	654,144
MWPAT Pool II, subsidized interest, due August 1, 2015	5,408,311	—	415,483	4,992,828	437,504
MWPAT Pool III, subsidized interest, due February 1, 2017	<u>8,070,563</u>	<u>—</u>	<u>568,172</u>	<u>7,502,391</u>	<u>586,417</u>
Total long-term notes	\$ <u>54,735,850</u>	<u>7,974,391</u>	<u>7,131,784</u>	<u>55,578,457</u>	<u>8,215,519</u>

### (5) SHORT-TERM OBLIGATIONS

During fiscal year 2007, the Commission instituted a commercial paper program for the purpose of financing capital expenditures. The following represents the Commission's commercial paper outstanding as of December 31, 2007 and 2006:

Description	Balance at December 31, 2006	Additions	Reductions	Balance at December 31, 2007
Commercial paper notes:				
Cabrera Capital program due March 7, 2008	\$ 5,000,000	25,000,000	15,000,000	15,000,000
Lehman Brothers program due February 13, 2008 through August 6, 2008	<u>20,000,000</u>	<u>127,800,000</u>	<u>116,200,000</u>	<u>31,600,000</u>
Total long-term notes	\$ <u>25,000,000</u>	<u>152,800,000</u>	<u>131,200,000</u>	<u>46,600,000</u>

Description	Balance at December 31, 2005	Additions	Reductions	Balance at December 31, 2006
Commercial paper notes:				
Cabrera Capital program due January 12, 2007	\$ —	5,000,000	—	5,000,000
Lehman Brothers program due January 8, 2007 through March 2, 2007	<u>—</u>	<u>20,000,000</u>	<u>—</u>	<u>20,000,000</u>
Total long-term notes	\$ <u>—</u>	<u>25,000,000</u>	<u>—</u>	<u>25,000,000</u>

Subsequent to December 31, 2007, all outstanding commercial paper notes were rolled over into other commercial paper notes with maturities ranging from January 7, 2008 to April 9, 2008 with interest rates ranging from 0.95% to 2.95% at maturity. The notes were then rolled-over again with new maturity dates later in fiscal year 2008.

#### (6) MASSACHUSETTS WATER RESOURCES AUTHORITY

The MWRA provides all the Commission's water supply and sewer treatment requirements and assesses the Commission for a portion of its actual operating and capital expenses. The assessment is based on the MWRA's fiscal year (July 1 to June 30), and payments are due to the Authority in ten equal installments excluding the months of January and July. Amounts included in the statements of operations for assessments by the Authority for 2007 and 2006 are as follows:

	2007	2006
Assessments allocated on:		
Water usage	\$ 63,342,139	61,786,176
Wastewater usage	<u>96,394,712</u>	<u>92,349,702</u>
Total	<u>\$ 159,736,851</u>	<u>154,135,878</u>

In 2007 and 2006, over 82% and 81% respectively, of water provided from the Authority was billable to customers. Since its inception, the Commission has maintained the percentage of billable water at 78% and is continuing to take steps to improve the amount of billable water, including replacement of old and defective meters and implementation of a comprehensive leak detection and repair program.

#### (7) TRANSACTIONS WITH THE CITY OF BOSTON

The Commission's ongoing program to meter City facilities has resulted in billings to ten City departments during 2007 and 2006, respectively, based on actual consumption of \$5,189,049 and \$4,630,853.

The City provides services to the Commission, including paving and facilities rental. Operating costs billed to the Commission by the City were \$405,227 and \$463,243 during 2007 and 2006, respectively. Capital costs billed by the City were \$2,578,880 and \$1,168,471 during 2007 and 2006, respectively.

The Commission has an agreement with the City that allows the Commission's water and sewer bills that have remained unpaid for more than two years to be added as liens on the City's property tax bills. Under this agreement, the City provides collection services on these bills for an administrative fee. As of December 31, 2007 and 2006 receivables totaling \$150,404 and \$160,373, respectively, of billings had been included on property tax bills.

Under the Commission's own tax lien program, accounts which have unpaid balances over two years old are transferred into the tax lien program for collection. As of December 31, 2007 and 2006, \$846,464 and \$796,007, respectively, remains outstanding.

#### (8) PENSION BENEFITS

The Commission provides retirement benefits to substantially all of its employees through the State Boston Retirement System (SBRS or the System), a cost sharing multi employer retirement plan.

A dispute concerning the Commission's past and future obligations to all Commission employees covered by the SBRS was settled in 1986, resulting in a payment of \$19,100,000 to the SBRS. This payment was funded primarily through 1985 and 1986 bond proceeds and is recorded as a deferred charge that will be recovered through future rates. As part of the settlement with the SBRS, the Commission annually reimburses the City for the Commission's share of pension benefits paid to Commission employees. The Commission's share is based upon the proportion of each employee's total years of creditable service, level of compensation, and group classification. Employees become 100% vested after ten years of creditable service as defined by Chapter 32 of the Massachusetts General Laws (MGL).

## BOSTON WATER AND SEWER COMMISSION

### (a) Description of the SBRS Plan

The SBRS is a cost-sharing multi-employer public employee retirement system established under Chapter 32 of the MGL and is a member of the Massachusetts Contributory Retirement System. The System provides retirement, disability, and death benefits to plan members and beneficiaries. Chapter 32 of the MGL assigns authority to establish and amend benefit provisions of the plan. The System issues a publicly available financial report which can be obtained through the Commonwealth of Massachusetts, Public Employee Retirement Administration Commission (PERAC), One Ashburton Place, Boston, Massachusetts 02108.

### (b) Funding Policy

Plan members are required to contribute to the SBRS at rates ranging from 5% to 11% of annual covered compensation. The Commission is required to pay into the SBRS its share of the remaining systemwide actuarially determined contribution plus administration costs which are apportioned among the employers based on active covered payroll. Through fiscal 1998, the Commonwealth of Massachusetts reimbursed the SBRS for a portion of benefit payments for cost-of-living increases. Beginning July 1, 1998, the SBRS is locally funding the cost of living adjustments as approved by the SBRS' Board of Retirement, the City's Mayor, and City Council. The contributions of plan members and the Commission are governed by Chapter 32 of the MGL. The Commission's contributions to the System for the years ended December 31, 2007, 2006 and 2005 were approximately \$528,649, \$501,311 and \$498,219, respectively, which equaled its required contribution each year. Total employee contributions, based on actuarially determined amounts, were approximately \$2,352,561, \$2,214,840 and \$2,094,303, or 8.9% of covered payroll in 2007, 2006 and 2005, respectively.

### (c) The Commission's Trust Fund

On a quarterly basis, the Commission deposits an amount into a Trust Fund, the assets of which are used to reimburse the SBRS for amounts paid on behalf of the Commission. As required by the Commission's Enabling Act, *employee* pension contributions are transferred to the SBRS directly and are either returned to employees upon

termination or, for vested employees, are used to defray a portion of the total retirement benefit. The Commission's policy is to make *employer* contributions to the Trust Fund based upon the actuarially determined cost of future benefits, net of employee contributions.

Trust Fund assets at December 31, 2007 and 2006 are as follows:

	2007	2006
Assets (at fair value):		
Common stock	\$ 35,519,458	38,188,602
International stock	14,235,538	14,713,678
Fixed income	<u>28,449,049</u>	<u>27,215,774</u>
Total	\$ <u>78,204,045</u>	<u>80,118,054</u>

The Trust Fund activity is as follows:

Assets (at fair value), December 31, 2005	\$ 73,864,257
Employer contributions	501,311
Investment income and gains	9,169,176
Management fees	(302,465)
Payments to SBRS	<u>(3,114,225)</u>
Assets (at fair value), December 31, 2006	80,118,054
Employer contributions	528,649
Investment income and gains	3,888,098
Management fees	(296,980)
Payments to SBRS	<u>(6,033,776)</u>
Assets (at fair value), December 31, 2007	\$ <u>78,204,045</u>

The investment portfolio is regulated by the MGL, Chapter 32, Section 23. The investments are managed by independent investment advisors. Bank of America is the custodian of the portfolio. The Trust Fund assets will be used by the Commission to reimburse SBRS in future years for required employer contributions.

### (9) POST-EMPLOYMENT BENEFITS OTHER THAN PENSIONS

GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, is required to be implemented by governments with annual revenues greater than \$100 million for financial statement periods beginning after December 15, 2006. Statement No. 45 requires governments to account for other postemployment benefits, primarily healthcare, on an accrual basis rather than on a pay-as-you-go basis. The effect is the recognition of an actuarially required contribution as an expense when a future retiree earns their postemployment benefit rather than when they use their postemployment benefit. To the extent that an entity does not fund their actuarially required contribution, a postemployment benefit liability is recognized over time.

In addition to offering pension benefits to their retirees, the Commission also offers other post-employment benefits (OPEB) upon retirement.

The Commission participates in the City of Boston's health insurance program, which is administered by the City of Boston as an agent multiple-employer defined benefit OPEB plan. The OPEB plan does not issue a stand-alone financial report. Participation in the City's plan was made via an agreement between the City and the Commission and may be amended with the agreement of both parties. The Commission also offers its retirees disability and life insurance, which are established and amended via collective bargaining agreements and the Policy Governing Executive Employees.

Medical and prescription drug benefits are provided to all eligible retirees not enrolled in Medicare through a variety of plans offered by Blue Cross Blue Shield of Massachusetts, Harvard Pilgrim HealthCare, and Neighborhood Health Plan. Medical and prescription drug benefits are provided to retirees enrolled in Medicare through supplemental and Medicare Advantage plans offered by Blue Cross Blue Shield of Massachusetts, Harvard Pilgrim HealthCare, and Tufts Health Plan.

Groups 1 and 2 retirees with at least 10 years or 20 years of creditable service are eligible at age 55 or any age, respectively. Retirees on ordinary or accidental disability retirement are eligible at any age while ordinary disability retirement requires 10 years of creditable service. The surviving spouse is eligible to receive both pre- and post-retirement death benefits, as well as medical and prescription drug coverage.

#### (a) Funding Policy

Employer and employee contribution rates are governed by the collective bargaining agreements and the Policy Governing Executive Employees. Prior to January 1, 2008, the City of Boston paid for the Commission's retirees' health benefits. Subsequent to January 1, 2008, the Commission will be responsible for the payment of their retirees' health benefits. The Commission currently funds the plan on a pay-as-you-go basis. The Commission and plan members share the cost of health insurance. As of June 30, 2005, the valuation date, the plan members contribute 10% to 25% of the monthly premium cost, depending on the plan in which they are enrolled. The Commission contributes the balance of the premium cost.

#### (b) Annual OPEB Cost and Net OPEB Obligation

The Commission's annual OPEB expense is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover the normal cost each year and amortize any unfunded actuarial liability over a period of thirty years. The following table shows the components of the Commission's annual OPEB cost for the year ending December 31, 2007, the amount actually contributed to the plan, and the change in the Commission's net OPEB obligation based on an actuarial valuation as of June 30, 2005:

Annual Required Contribution (ARC)	\$ 5,987,121
Interest on net OPEB obligation	—
Adjustment to ARC	—
Annual OPEB cost	<u>5,987,121</u>
Contributions made	—
Change in net OPEB obligation	<u>5,987,121</u>
Net OPEB obligation—beginning of year	—
Net OPEB obligation—end of year	<u>\$ 5,987,121</u>

The Commission's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation were as follows:

Fiscal Year Ended	Annual OPEB Cost	Percentage of OPEB Cost Contributed	Net OPEB Obligation
2007	\$ 5,987,121	—%	5,987,121

The Commission's net OPEB obligation as of December 31, 2007 is recorded as a component of the "Other Long term Liability" line item.

## BOSTON WATER AND SEWER COMMISSION

### (c) Funded Status and Funding Progress

The funded status of the plan as of December 31, 2007, based on an actuarial valuation as of June 30, 2005, was as follows:

Actuarially accrued liability (AAL)	\$ 85,588,894
Actuarial value of plan assets	—
Unfunded actuarial accrued liability (UAAL)	\$ 85,588,894
Funded ratio (actuarial value of plan assets/AAL)	—%
Covered payroll (active plan members)	\$ 23,410,932
UAAL as a percentage of covered payroll	365.59%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the Commission are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multi-year trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

### (d) Actuarial Methods and Assumptions

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the Commission and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the Commission and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the June 30, 2005 actuarial valuation, the projected unit credit cost method was used. The actuarial assumptions included a 5.0% investment rate of return and an annual health care cost trend rate of 10%–12% initially, reduced by decrements to an ultimate rate of 5% after 5–7 years. The health care cost trend rate differs between the master medical, master medical prescription drug, and other healthcare plans. The actuarial value of assets was determined using the market value of investments. The Commission's unfunded actuarial accrued liability is being amortized as a level percentage of pay on a closed basis. The remaining amortization period at January 1, 2007 was thirty years.



**(10) DEPOSIT AND INVESTMENT RISKS**

The following represents the Commission's essential risk information about deposits and investments for the years ended December 31, 2007 and 2006.

**(a) Custodial Credit Risk**

Custodial credit risk is the risk that in the event of bank failure, the Commission's deposits may not be returned. The Commission carries deposits that are fully insured by FDIC insurance or collateralized with securities held by the Commission or the Commission's agent in the Commission's name. The Commission also carries deposits that are not collateralized and are uninsured. The Commission does not have a formal policy for managing custodial credit risk of deposits. As of December 31, 2007 and 2006, the bank balances of uninsured and uncollateralized deposits totaled approximately \$8,165,731 and \$10,593,999, respectively.

Further, all of the Commission's investments are held by a third-party in the name of the Commission.

**(b) Investment Policy**

Investment of Commission funds is governed by federal and state law and is restricted to permitted investments as defined by the Commission's General Revenue Bond Resolution and Supplemental Resolutions. Revenues generated from the investment of Commission funds reduce the amount the Commission must charge to its customers, while any investment losses would negatively affect the Commission's general rates and charges. Consequently, the Commission shall at all times maintain a fully invested, diversified portfolio with the objective of achieving the highest yield that is attainable in conjunction with a very low risk of loss of capital. The basic criteria that will be used in making investment decisions include the evaluation of risk/reward tradeoffs, historical price spreads between different securities, the slope of the yield curve and the anticipated cash flows of the different investment accounts of the Commission.

Current permitted Investments under the General Revenue Bond Resolution include:

1. Any bond or other obligation to which principal and interest are unconditionally guaranteed by the United States of America.
2. Any bond or other obligation of any state, agency or local government unit of any state which are:
  - A. noncallable
  - B. fully collateralized by fund consisting of cash, bonds or obligations of one of the above.
3. Public Housing bonds which are secured by the United States of America, certain notes issued by public agencies or municipalities fully secured by the United States of America or obligations issued by State or public agencies or municipalities carrying the highest bond rating.
4. Obligations of any state to which the full faith and credit of the state is pledged and are within the two highest bond ratings.
5. Prime Commercial Paper rated A-1 or P-1.
6. Shares of a money market fund which is open ended and rated A or better or a money market fund of banks meeting certain criteria.
7. Certificates of Deposits issued by FDIC banks which are fully secured by obligations described in 1 or 2 above.
8. Repurchase Agreements fully collateralized by obligations described in 1 or 2 above.
9. Futures contracts traded on exchange for 1, 2, 3, and 4 above.

A single investment can not be more than \$15 million and can only be purchased once. Further, all investments of the Commission are held in the Commission's name by third-party.

## BOSTON WATER AND SEWER COMMISSION

### (c) Interest Rate Risk

The following is a listing of the Commission's fixed income investments and related maturity schedule (in years) as of December 31, 2007 and 2006:

Investment type	Fair Value	Less than 1	2007		
			1—5	6—10	More than 10
U.S. government agencies	\$ 148,191,235	56,492,884	26,265,049	54,636,142	10,797,160
Guaranteed investment contract	11,746,250	—	—	—	11,746,250
Open ended mutual funds	19,985,486	19,985,486	—	—	—
	<u>\$ 179,922,971</u>	<u>76,478,370</u>	<u>26,265,049</u>	<u>54,636,142</u>	<u>22,543,410</u>

Investment type	Fair Value	Less than 1	2006		
			1—5	6—10	More than 10
U.S. government agencies	\$ 94,665,767	5,804	31,461,192	17,783,534	45,415,237
Guaranteed investment contract	11,746,250	—	—	—	11,746,250
Other (comm. paper)	48,839,208	48,839,208	—	—	—
Open ended mutual funds	20,369,468	20,369,468	—	—	—
	<u>\$ 175,620,693</u>	<u>69,214,480</u>	<u>31,461,192</u>	<u>17,783,534</u>	<u>57,161,487</u>

The Commission's guidelines do not specifically address limits on maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

### (d) Credit Risk

The Commission's fixed income investments as of December 31, 2007 and 2006 were rated by Standard and Poor's and/or an equivalent national rating organization and the ratings are presented below using the Standard and Poor's rating scale:

Investment type	Fair Value	2007		
		AAA	AA	Not rated
U.S. government agencies	\$ 147,405,596	147,405,596	—	—
Guaranteed investment contract	11,746,250	—	—	11,746,250
Open ended mutual funds	19,985,486	19,985,486	—	—
	<u>\$ 179,137,332</u>	<u>167,391,082</u>	<u>—</u>	<u>11,746,250</u>

Investment type	Fair Value	2006		
		AAA	AA	Not rated
U.S. government agencies	\$ 93,527,652	93,527,652	—	—
Guaranteed investment contract	11,746,250	—	—	11,746,250
Other (comm. paper)	48,839,208	—	48,839,208	—
Open ended mutual funds	20,369,468	20,369,468	—	—
	<u>\$ 174,482,578</u>	<u>113,897,120</u>	<u>48,839,208</u>	<u>11,746,250</u>

As of December 31, 2007 and 2006, the Commission had \$785,639 and \$1,138,115 of investments that are explicitly guaranteed by the U.S. government that are not included above schedules, respectively.

#### (e) Concentration Risk

The Commission has no investments, at fair value, that exceed 5% of the Commission's investments as of December 31, 2007 and 2006.

#### (11) LEASE COMMITMENTS

The Commission leases office space and equipment under various leases that have been accounted for as operating leases. The payments received under these leases are not material.

Rent expense under operating leases amounted to \$104,362 and \$134,141 in 2007 and 2006, respectively.

#### (12) COMMITMENTS

The capital improvement program is currently in progress. As part of this program, the Commission has entered into a number of contracts for the design and construction of its infrastructure. Commitments under these contracts aggregate approximately \$52.1 million as of December 31, 2007. Capital improvements, primarily related to enhance the operation of the water and sewer system projects including reducing pollution to Boston Harbor and neighboring waterways, are expected to aggregate approximately \$146.9 million for 2008 through 2009. Of this amount, approximately \$128.4 million represents extension and improvement projects and \$18.5 million represents renewal and replacement projects. The extension and improvement projects will be funded by federal, state and Massachusetts Water Resources Authority grants and loans. The remaining amounts will be funded from the Commission's bond proceeds and operating revenues.

#### (13) RISK MANAGEMENT AND OTHER INSURANCE

The Commission carries self insured retention limits for claims filed under workers' compensation and general liability and completely self insures for all unemployment benefits. The workers' compensation self insured retention limit is \$750,000 per claim and is supplemented with \$25 million in excess coverage purchased through an outside carrier. For general liability, the Commission's self insured limits are \$1 million per occurrence, \$2.5 million aggregate, and is subordinate to \$10 million of excess coverage purchased through an outside carrier. Under the sections of the Model Water and Sewer Act, the Commission's tort liability is capped at \$100,000 per claimant.

The Commission maintains other insurance coverage as follows:

Policy type	Coverage
Vehicles	Combined single limit of \$1 million/accident, there is a \$5,000/occurrence deductible for property damage
Property	Aggregate limit of \$108 million on Harrison Ave. with other sublimits at other BWSC facilities.
Public officials	Coverage of \$3 million; \$100,000 self-insurance retention
Fiduciary	\$2.5 million coverage; with \$10,000 deductible per claim
Crime	Employee dishonesty coverage of \$5 million

Insurance claims for all policies have not exceeded coverage by a material amount in the past three years.

The Commission participates in the City's health benefits plans for which the City assesses monthly premiums to the Commission based on current enrollments.

Liabilities for self insured claims are reported if it is probable that a loss has been incurred and the amount can be reasonably estimated. The Commission has established a liability based on historical trends of previous years and attorney's and independent insurance reserve appraiser's estimates of pending matters and lawsuits in which the Commission is involved. Unemployment claims paid during 2007 and 2006 were immaterial.

Changes for the years ended December 31, 2007 and 2006 are as follows:

	2007	2006
Beginning balance of reserves	\$ 2,294,914	2,367,407
Payment of claims attributable to events of both current and prior years:		
Workers' compensation	(267,453)	(422,493)
General liability	(156,150)	—
Incurred claims	<u>598,000</u>	<u>350,000</u>
Ending balance of reserves	<u>\$ 2,469,311</u>	<u>2,294,914</u>

Incurred claims represent the total of a provision for events of the current fiscal year and any change in the provision for events of the prior fiscal years.

## BOSTON WATER AND SEWER COMMISSION

### (14) CONTINGENCIES

The Commission is involved in ordinary and routine litigation and other matters related to its operations and the establishment of rates. Management believes that the resolution of these matters will not materially affect the financial position of the Commission.

The Commission has received federal and state grants for specific purposes that are subject to review and audit by the grantor agencies. Such audits could lead to requests for reimbursement to the grantor agency for expenditures disallowed under terms of the grant. The Commission believes such disallowances, if any, will not be significant.

The Commission is involved as a defendant in litigation regarding the pollution of Boston Harbor. Management believes that the Commission's extensive capital improvement program (see note 11) addresses probable actions that the Commission may be required to undertake in connection with this litigation. Additionally, the Commission is likely to bear either directly or through future assessments of the Authority a substantial portion of the financial costs involved. As of December 31, 2007, the overall cleanup costs are estimated to be approximately \$893.4 million. However, the extent of the Commission's liability for these costs cannot be determined.

## SCHEDULE OF FUNDING PROGRESS—OPEB

Required Supplementary Information, December 31, 2007  
(Unaudited)

Actuarial valuation date	Actuarial value of assets (a)	Actuarial accrued liability (b)	Unfunded (b-a)	Funded ratio (a/b)	Covered payroll (c)	((b-a)/c)
6/30/2005	\$ —	85,588,894	85,588,894	—%	23,410,932	365.6%

See accompanying independent auditors' report.

# BOSTON WATER AND SEWER COMMISSION

## SUPPLEMENTAL SCHEDULE OF REVENUES AND EXPENSES—RATE BASIS

Years ended December 31, 2007 and 2006

	2007	2006
Revenues:		
Water revenue	\$ 112,633,394	107,394,320
Sewer revenue	140,286,933	125,432,655
Subtotal	<u>252,920,327</u>	<u>232,836,975</u>
Less:		
Adjustments	6,329,825	5,609,032
Discounts	866,197	846,151
Bad debt	138,479	361,202
Subtotal	<u>7,334,501</u>	<u>6,816,385</u>
Net billed charges	245,585,826	226,010,590
Prior year surplus	134,108	582,292
Miscellaneous revenues:		
Late charge revenue	943,257	993,771
Investment income	7,886,944	7,833,296
Fire pipe revenue	3,595,899	3,469,844
Other income	5,367,899	8,509,793
Total revenues	<u>263,513,933</u>	<u>247,399,586</u>
Direct operating expenses:		
Salaries and wages	28,138,771	26,801,523
Overtime wages	613,197	605,167
Fringe benefits	6,603,848	5,927,567
Supplies and materials	2,283,837	2,308,064
Repairs and maintenance	6,582,756	4,181,232
Utilities	1,067,410	1,351,769
Professional services	2,691,028	2,782,136
Space and equipment rentals	106,982	137,077
Other services	1,256,064	1,385,327
Insurance	766,680	782,078
Travel and training	53,825	46,358
Damage claims	125,833	534,744
Inventory	26,304	17,100
Capital outlay	94,642	85,151
Total direct operating expenses	<u>50,411,177</u>	<u>46,945,293</u>
Nonoperating expenses:		
MWRA assessment	159,736,851	154,135,878
Capital improvements	13,758,716	11,147,813
Principal payments	19,969,755	18,527,795
Interest expense	15,345,212	15,702,119
Deposits to reserve funds	3,971,000	568,000
SDWA assessment	240,468	238,580
Total nonoperating expenses	<u>213,022,002</u>	<u>200,320,185</u>
Total current expenses	<u>263,433,179</u>	<u>247,265,478</u>
Current year rate surplus	\$ <u>80,754</u>	<u>134,108</u>

This supplemental schedule presents the Commission's revenues and expenses on the basis that is presented in the Commission's budget and rate-setting documents. See footnote 1 in the notes to the basic financial statements for the differences between this supplemental schedule and GAAP.

See accompanying independent auditors' report.





**BOSTON WATER AND SEWER COMMISSION  
980 HARRISON AVENUE  
BOSTON, MA 02119  
[WWW.BWSC.ORG](http://WWW.BWSC.ORG)**